

What is claimed is:

1. A cushion for a wheelchair having a top surface, the cushion comprising:
a first cushion member; and
a second cushion member having a phase change material and a lubricant, the second cushion being positioned so that it is closer to the top surface of the cushion than the first cushion member.
2. The cushion of claim 1, wherein the second cushion member further comprises an enclosure constructed of a flexible, moisture-resistant material that is formed to create an internal volume sized to accept and surround the phase change material and lubricant.
3. The cushion of claim 1, wherein the first cushion member is comprised of a deformable filler material and an enclosure constructed of a flexible, moisture-resistant material, the enclosure being sized to accept and surround the filler material.
4. The cushion of claim 1 further comprising a cover sized and shaped to enclose the first cushion member and the second cushion member and wherein the cover forms at least a portion of the top surface and a bottom surface of the cushion.
5. The cushion of claim 1, further comprising at least one support rail cushion, wherein the support rail cushion includes a deformable filler material and a support rail cushion enclosure made of a flexible, moisture-resistant material that is sized to accept and surround the filler material.
6. The cushion of claim 5 having a back surface, and wherein the support rail cushion is positioned so that it is closer to at least a portion of the back surface of the cushion than the second cushion member.

7. The cushion of claim 5 having a left side surface, a right side surface and a back surface, wherein the support rail cushion is positioned so that at least a portion of the support rail cushion is closer to the left-side surface, the right side surface and the back surface of the cushion than the second cushion member.

8. The cushion of claim 5, wherein the support rail cushion enclosure is formed to separate portions of the deformable filler material into at least two separate compartments within the support rail cushion enclosure.

9. The cushion of claim 1, further comprising a cushion member carrier shaped to accept and substantially surround the first cushion member and the second cushion member.

10. The cushion of claim 9, wherein the cushion member carrier includes a divider that isolates the first cushion member from the second cushion member.

11. The cushion of claim 9, wherein the cushion member carrier is formed of a flexible material.

12. The cushion of claim 1, further comprising a base member, wherein:
at least a portion of the base member is formed of a polymeric foam; and
the base member is positioned so that at least a portion of the first cushion member and the second cushion member are closer to the top surface of the cushion than the base member.

13. The cushion of claim 12, wherein the base member is located within a flexible and substantially moisture impervious material.

14. The cushion of claim 12, wherein the base member has a left edge, a back edge and a right edge, further comprising a first base member that forms at least a portion of the left, back and right edges of the base member.

15. The cushion of claim 14, further comprising a second base member attached to the first base member on at least a portion of the first base member that forms a portion of the left edge and a portion of the right edge.

16. The cushion of claim 1, wherein the cushion is sized and shaped to fit in the seating area of the wheelchair.

17. A cushion for a wheelchair, the cushion comprising:

a cushion matrix, wherein the cushion matrix includes

at least one first cushion member wherein the at least one first cushion member includes an amount of deformable filler material and an enclosure constructed of a flexible, moisture-resistant material that is formed to create an internal volume to accept and surround the filler material;

at least one second cushion member wherein the at least one second cushion member includes an amount of a filler material including an encapsulated phase change material, and an enclosure constructed of a flexible, moisture-resistant material that is formed to create an internal volume to accept and surround the amount of filler material; and;

at least one support rail cushion; and

a cushion member carrier, formed of a flexible material, shaped to accept and enclose each of the at least one first cushion member, each of the at least one second cushion member and the support rail cushion; and

a cushion base member.

18. The cushion of claim 17, wherein the cushion matrix includes a plurality of first cushion members.

19. The cushion of claim 18, wherein the cushion has an identical number of first cushion members and second cushion members.

20. The cushion of claim 19, wherein at least one first cushion member has a different amount of filler material from another first cushion member.

21. The cushion of claim 19, wherein the first cushion member has a first major surface and the second cushion member has a second major surface and wherein the cushion member carrier includes a plurality of cushion compartments, each of which is sized and shaped to accept at least one first cushion member and at least one second cushion member, wherein each compartment is constructed to allow at least one first cushion member and at least one second cushion member to be positioned such that the first major surface is adjacent to the second major surface.

22. The cushion of claim 21, wherein the cushion compartments are arranged so that each cushion compartment is adjacent to at least one other cushion compartment.

23. The cushion of claim 21, wherein each cushion compartment includes one first cushion member and one second cushion member.

24. The cushion of claim 23, wherein the cushion has a top surface and the second cushion member is positioned closer to the top surface of the cushion than the first cushion member.

25. The cushion of claim 19, wherein the amount of filler material located within the second cushion member has a volume less than a volume of filler material located within at least one first cushion member.

26. The cushion of claim 17, wherein at least one support rail cushion is positioned so that at least a portion of the support rail cushion is closer to a back surface of the cushion than the at least one first cushion member and the at least one second cushion members.

27. The cushion of claim 17, wherein the phase change material has a melting temperature of greater than 28 degrees Celsius.

28. The cushion of claim 17, wherein the encapsulated phase change material has a re-crystallization point of less than 28 degrees Celsius.

29. The cushion of claim 17, wherein the encapsulated phase change material is comprised of octadecane paraffin.

30. The cushion of claim 17, wherein the encapsulated phase change material is comprised of one of tetradecane, pentadecane, hexadecane, heptadecane, nonadecane, eicosane, heneicosane and docosane.

31. The cushion of claim 17, wherein the cushion member carrier is sized to accept the cushion base member.

32. A cushion having top, bottom, left, right, front and back surfaces for use in a wheelchair, wherein the cushion has a depth defined as a distance from the front surface to

the back surface, a width defined as a distance from a left surface to the right surface and a thickness defined as a distance from the top surface to the bottom surface, wherein the cushion is positionable in a seating area of the wheelchair such that the front surface is proximal to a front portion of the seating area and the back surface is proximal to a back portion of the seating area, and wherein the bottom surface the cushion contacts with a top surface of the seating area of the wheelchair and the top surface of the cushion is positioned to accept a user when the user is seated upon the wheelchair, the cushion comprising:

a base, wherein the base has left, right, front, back, top and bottom surfaces that are oriented similarly substantially the same depth and width as the cushion, and the bottom surface of the base is substantially flat, wherein the base includes

a first base member, formed of a polymer, generally rectangular in shape, located near the bottom surface of the base, sized to extend substantially along the width and depth of the cushion, wherein a thickness of the first base member has a constant dimension along a significant portion of the depth of the cushion and has a taper on the top of the lower base member so that a thickness of the lower base member varies along a significant portion of the width of the cushion;

a second base member, located above the first base member, wherein a thickness of the second base member is substantially constant along a significant portion of the depth of the cushion and has a taper along a significant portion of the width of the cushion on the bottom of the upper base member such that the taper of the

upper base member interfaces and complements the taper of the lower base member; and

an outer base member, having a generally u-shape with an inside surface which is adjacent to the left, right, and back surfaces of the lower and upper base members and an outside surface which forms the left, right and back surfaces of the base, a bottom surface which forms a part of the bottom surface of the base, and a top surface which has a taper wherein the thickness of the top surface at the inside surface is at least as much as the thickness of the lower and upper surfaces and wherein the thickness of the outer base member increases as to a maximum thickness at the outside surface of outer base member;

a cushion matrix comprising a plurality of individual cushion bladders, wherein each individual cushion bladder includes

a first cushion member, comprised of a filler material;

a second cushion member, located above and adjacent to the first cushion member, wherein the second cushion member is substantially isolated from the first cushion member, and wherein the second cushion member includes a heat transfer structure comprised of an encapsulated phase change material and a fill material;

a support rail comprising a plurality of individual support bladders, wherein each of the individual bladders includes a compartment, comprising filler material,

and wherein the individual bladders are attachable and detachable from the base and are arranged to extend along the left, right, and back edges of the cushion so as to substantially surround the cushion matrix along the left, right, and back edges; and

an envelope, which provides the external surfaces of the cushion wherein the base, cushion matrix and support rail are located within a volume of the envelope and are arranged so that the base member is substantially closer to the bottom of the cushion than the cushion matrix and support rail.

33. The cushion of claim 32, wherein the first base member is securely attached to the outer base member to provide a pelvic captivation structure.

34. The cushion of claim 32, wherein the first and second base members are connected to each other through use of an adhesive and enclosed within a pouch.

35. The cushion of claim 32, wherein the support rail is shaped and positioned to include a structure on the back edge of the cushion to provide sacrum relief.

36. The cushion of claim 32, wherein at least one of the individual bladders that comprise the support rail has an exterior surface that is attached to itself along a cross-sectional area of the bladder so as to pinch the bladder and at least partially restrict movement of the filler material within the bladder.

37. The cushion of claim 32, wherein the phase change material is comprised of octadecane paraffin.

38. The cushion of claim 32, wherein the phase change material has a melting point of greater than 28 degrees Celsius.

39. The cushion of claim 32, wherein the phase change material has a re-crystallization point of less than 28 degrees Celsius.